

Notice of Allowability

Application No.

10/721,346

Examiner

Dung Lam

Applicant(s)

CHO, SEONG-KWAN

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/26/03.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 26 November 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Sahota, Registration No. 47051 on 8/22/05.

Claim 3, line 6, "an telephone" has been changed to --a telephone--.

Claim 4, line 4, "performed" has been changed to --dialed--.

Claim 8, line 6, "an telephone" has been changed to --a telephone--.

(End of Examiner's Amendment)

Allowable Subject Matter

1. Claims 1-20 are allowed.

The following is the examiner's statement of reasons for allowance:

Regarding independent **claim 1**, the present invention teaches a method of processing a call of a wireless local area network exchange using a callback function, comprising the steps of: periodically transmitting a keep-alive signal to the wireless local area network exchange from terminals; considering terminals from which the keep-alive signal is not transmitted as keep-dead terminals, and transmitting a telephone number list of the keep-dead terminals to each terminal by the wireless local area network exchange; attempting calls to target terminals to be substantially called, and requesting a callback service according to user intentions when telephone numbers of the target terminals are stored in the telephone number list by the terminals; and automatically attempting the calls to the target terminals from the terminals when the target terminals are converted into a keep-alive state from a keep-dead state and the callback service is requested.

Regarding independent **claim 13**, the present invention teaches an apparatus for processing a call of a wireless local area network, comprising: a terminal, comprising: a user

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interface interfacing with a user to perform a corresponding command according to a selected operation of the user; a call controller overall controlling calls; a network interface interfacing to physically perform communication between the terminal and the wireless local area network exchange; and a system interface interfacing with a wireless local area network exchange system and having data on an the telephone number list storing a list of keep-dead target terminals and data on a call list storing a call request scheduled list corresponding to telephone numbers to which a callback service is requested by the user among telephone numbers of the target terminals that fail to call attempts; and a wireless local area network exchange, comprising: a call controller overall controlling the calls; a terminal interface considering terminals from which a keep-alive signal is not transmitted as keep-dead terminals as interfacing with the terminal and storing the telephone number list about the keep-dead terminals in a terminal state information storage; a network interface interfacing to physically perform communication between the terminal and the wireless local area network exchange; and an access point connected to the network interface in a wire line to enable wireless communication between the wireless local area network exchange and the terminal and transceiving a wireless signal to the terminal.

Regarding independent **claim 14**, the present invention teaches an apparatus for processing a call of a wireless network, comprising: a terminal, comprising: a user interface interfacing with a user to perform a corresponding command according to a elected operation of the user; a call controller controlling calls; a network interface interfacing to physically perform communication between the terminal and the wireless network exchange; and a system interface interfacing with a wireless local area network exchange system and having data on an address list storing a list of keep-dead target terminals and data on a call list storing a call request scheduled list corresponding to addresses to which a callback service is requested by

the user among addresses of the target terminals that fail to call attempts; and a wireless network exchange, comprising: a call controller controlling the calls; a terminal interface considering terminals from which a keep-alive signal is not transmitted as keep-dead terminals as interfacing with the terminal and storing the address list about the keep-dead terminals in a terminal state information storage; a network interface interfacing to physically perform communication between the terminal and the wireless network exchange; and an access point connected to the network interface in a wire line to enable wireless communication between the wireless network exchange and the terminal and transceiving a wireless signal to the terminal.

Regarding independent **claim 15**, the present invention teaches a method of processing a call, comprising: periodically transmitting a keep-alive signal to a wireless network exchange from a plurality of terminals; considering terminals from which the keep-alive signal is not transmitted as keep-dead terminals, and transmitting an address list of the keep-dead terminals to each terminal by the wireless network exchange; attempting calls to target terminals to be substantially called, and requesting a callback service according to user intentions when addresses of the target terminals are stored in the address list by the terminals; and automatically attempting the calls to the target terminals from the terminals when the target terminals are converted into a keep-alive state from a keep-dead state and the callback service is requested.

The closest prior arts, Curbow (US Publication No. 2003/0206619) and Trandal (US Publication No. 2003/0081752) discloses a method and apparatus for callback service which utilizes the presence detection from the network but fail to anticipate or render all the above combined limitations.

Regarding **claims 2-12**, the claims are allowed as being dependent of claim 1.

Regarding **claims 16-20**, the claims are allowed as being dependent of claim 15.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-6497.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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8/19/05
LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER